# ABSTRACT OF THE INVENTION

Disclosed is a room planning and design system, comprising a virtual room space comprising a virtual representation of a physical room space, an object library of virtual

5   objects, said virtual objects comprising virtual representations of equipment, machines and objects that may be placed in a room, a user interface comprising a first user interface component for selecting said virtual objects from said virtual library and positioning them in said virtual room space, a second user interface component for manipulating the positions and orientations of said virtual objects within said virtual room space, a workspace comprising a

10   physical model of said physical room space, physical marker objects substantially scaled to said workspace for manual placement and orientation of said markers objects in said workspace, one or more detectors for detecting information regarding the positioning of said marker objects in said workspace and transmitting said information to a visualization module, and said visualization module adapted to receive said information from said detectors and

15   utilize said information for positioning said virtual objects within said virtual room space.